



FERROXCUBE
CORPORATION OF AMERICA
 SAUGERTIES, NEW YORK

FERROXCUBE
50 MIL
MEMORY CORE

Bulletin 875

PART NUMBER 50 FC 05

Application: Low temperature coefficient core for medium speed coincident current memories with cycle time of 4.0 to 6.0 μsec — operated over wide ambient temperature ranges without compensation.

Mechanical Dimensions: Outside diameter = .048 $\pm$.002
 Inside diameter = .0245 $\pm$.002
 Height = .0158 $\pm$.0012

Definitions: All terms used in this specification are defined in the A.S.T.M. proposed method of test for coincident current memory cores. Definitions are listed on the inside back cover of the Ferroxcube Memory Components Section Folder.

Average Operating Conditions:

	0°C	70°C
nIf	835	748 mA
nIp	417	374 mA
Tr	0.25	0.25 μsec
nTd	1.50	1.50 μsec
V ref.	4.50	4.50 mV
N (dist.)	$\rightarrow \infty$	$\rightarrow \infty$

Average Output Signals: Under Above Operating Conditions

	0°C	70°C
uV ₁	72	74 mV
rV ₁	70	72 mV
dV _z	7.00	8.00 mV
T _p	0.52	0.52 μsec
T _s	0.93	0.98 μsec

Output Characteristics:

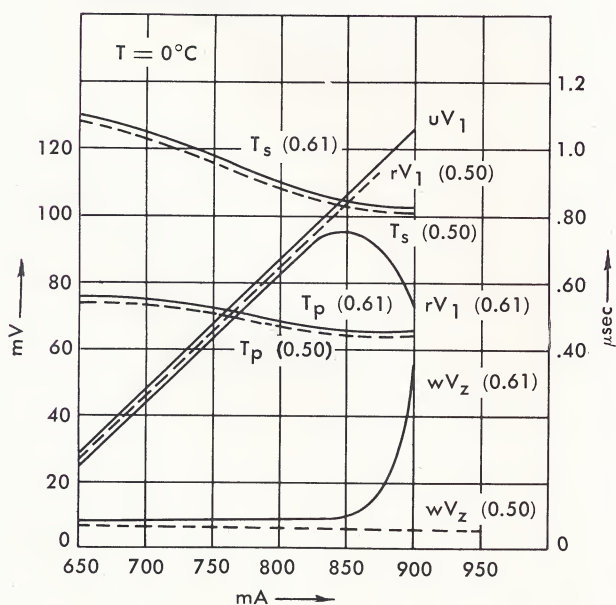


Figure 1

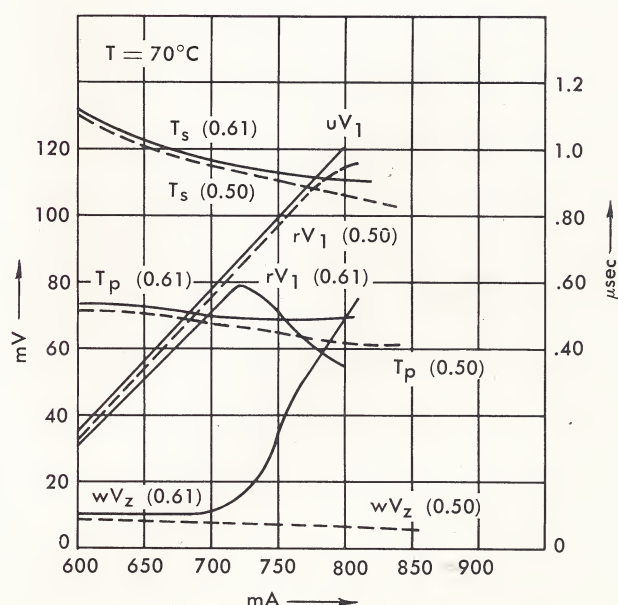


Figure 2

Figures 1 and 2 give information at 0°C and 70°C , respectively, at other drive currents (adverse conditions).

Adverse Test Conditions:

	0°C — 70°C	
tIf	680	mA
tIp	415	mA
Tr	0.25	μsec
Td	2.50	μsec
V ref.	4.50	mV
N (dist.)	32	

Average Output Signals Under Adverse Test Conditions:

	0°C	70°C
uV _I	40	73 mV
rV _I	38	69 mV
dV _Z	9.0	10 mV
T _p	0.55	0.52 μsec
T _s	1.03	0.98 μsec
U-R	2.0	4 mV

Manufacturing Test Limits:

	0°C — 70°C	
uV _I	—	
rV _I	33 mV (min.)	
dV _Z	11 mV (max.)	
T _p	0.44 μsec (min.)	— 0.61 μsec (max.)
T _s	1.15 μsec (max.)	

**FERROXCUBE CORPORATION OF AMERICA/SAUGERTIES, N.Y.**



FERROXCUBE CORPORATION OF AMERICA

Saugerties, New York / tel: 914 CHerry 6-2811

New Memory Core data and the March edition of the "Ferroxcube Engineer" are enclosed to keep you up-to-date with the latest developments at Ferroxcube.

Included in the new Memory Core material, are up-dated specifications for both 30 and 50 mil cores as well as new characteristic curves for the larger units. Replace the now obsolete Bulletins 842, 873, 874, and 875 currently in your catalog with the new Bulletins 842, 873, 874, and 875.

Cordially,

Robert A. Wyllie

Robert Wyllie, Manager,
Advertising and Public Relations